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Rebuild Hawaii Consortium Meeting August 12, 2003 Notes

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Attendees:

AIA Honolulu – Purnima McCutcheon; City & County of Honolulu — Allyn Lee, Darren Wong; County of Hawaii— Raymond Carr; County of Kauai— Glenn Sato; Department of Accounting & General Services—Richard Yasunaga; Department of Business, Economic Development & Tourism (DBEDT) – Liz Raman, Dean Masai, Howard Wiig; **Department of Education**— Rae Loui, Ray Minami, Gilbert Chun; Eco-Lite- Tom Brennan; Hawaiian Electric Company, Inc. (HECO) - Jim Maskrey, Sam Nichols, Derek Sonoda: HSI Mechanical—Bill Short; Hickam Air Force Base— Dave Stiner, Chris Lippert; Montessori School of Maui – Cynthia Winans-Burns; Navy PWC Pearl—Nate Eisenpress, Kevin Saito; Navy Region Hawaii – Eric Kawamoto, John Dunbar; NORESCO—Tracy Taoka; Pacific Energy – Steve Olsen; Scheibert Energy Company—Todd Scheibert; Strategic Energy Innovations—Jennifer Webb Tosaki; The Gas Company— Steve Golden, Charlie Senning; U.S. Department of Energy Pacific Liaison- Eileen Yoshinaka; U.S. Department of Housing & Urban Development—Ramona Mullahey; University of Hawaii Community Colleges— Maynard Young, University of Hawaii Maui Community College—Don Ainsworth, Rich Miller: University of Hawaii School of Architecture – Fred Creager, Steve Meder, Alex Maly, Claire Rohlinger.

New Officers Installed. Jim Maskrey, HECO, and **Steve Golden**, The Gas Company, were installed as President and Vice President, respectively. In his remarks to the group, Maskrey said that his goal was to make projects happen.

Outgoing President, **Steve Holmes**, Sustainability Honolulu, was recognized for his many efforts to advance sustainability and energy efficiency, including the retrofit of Honolulu Hale, LED traffic lights, Memorandum of Understanding between the Board of Water Supply and University of Hawaii at Manoa for water efficiency projects, creation of a low income solar program for the City, and pushing for new efficiency codes.

Eileen Yoshinaka reported that the Pump System Assessment Tool Training course was very successful. The course was held on Maui and Oahu and more than 50 people attended. Six participants successfully took the test to enable them to become instructors. Planning is under way to accomplish the certification of the instructors.

Jennifer Webb Tosaki reported on the Hawaii Lodging, Hospitality, and Food Services Expo Exhibit that she organized. **Steve Holmes** and **Liz Raman** also manned the booth and were assisted by **Tom Brennan** from his adjacent Eco-Lite exhibit.

Results of DBEDT's facility upgrade analysis Phase I were presented by **Liz Raman**. Total annual electric utility costs being incurred by the State for operating its facilities are approximately \$84 million. Nearly 80% of total consumption was on Oahu. Overall, 46% of electricity is consumed by educational facilities—19.19% Department of Education; 22.25% University of Hawaii; and 4.4% Community College System. Phase II of the analysis will include site visits and energy assessments for four to five typical state buildings to determine potential conservation opportunities by building type.

Don Ainsworth and **Rich Miller** gave an extensive presentation on their ongoing energy conservation projects at Maui Community College. Their efforts include interior lighting retrofits, vending machine controllers, exterior lighting retrofits, EMS system upgrade, and modified chiller consolidation with a combined heat and power initiative.

Kevin Saito announced that the Navy Energy Management course will be held November 10 to 14, 2003, and that it will also include vendor and other exhibits, as well as a field trip. Several participants expressed interest in attending the course.

Allyn Lee said that City & County is still working on the interconnection agreement for their cogen unit and hope to have it on line in September. Presently, lighting and chiller retrofits are saving about \$100,000 annually.

Ray Carr reported that the Gateway Project at the Natural Energy Laboratory of Hawaii is seeking a LEEDS platinum rating. The Hawaii County Department of Water Supply (DWS) is making progress with their \$11.6 million Energy Efficiency Program projected to save \$2.6 million per year, with a 4.4 year payback. The DWS currently has an \$8 million annual electricity bill.

Glenn Sato said that the Kauai Lagoons property has been purchased by Alexander & Baldwin and he hopes to move forward with them to implement the irrigation system study. Currently the project has a 3.8-year payback, but with the KIUC rebate it will be about 2.2 years. The National Tropical Botanical Garden project, which was to be powered by a fuel cell, is moving slowly.

The University of Hawaii Manoa campus is expected to save millions of gallons of water under its MOU with the Board of Water Supply, according to **Steve Meder**. Meder also reported on several other projects that are ongoing, including a water catchment study for campus buildings, solar assessment for campus rooftops, a rewrite of the State solar map, a benchmarking project on campus. The study of portable classrooms and recommendations for measures to improve classroom comfort is almost complete. Meder's findings include, among others that temperature at the desktop in the portables studied, averaged about 89°. The project has generated enough interest in the architectural community that the AIA is leading an effort to design a Hawaii-specific comfortable portable classroom.

Purnima McCutcheon, representing AIA Honolulu Chapter, reports that the AIA Honolulu Office is seeking a LEED gold rating. They have developed a brochure for

self-guided tours of the energy efficient office. McCutcheon is part of the group that includes AIA, the University of Hawaii School of Architecture, and the UH Foundation working on the new portable classroom design.

Dave Stiner discussed the \$7.34 million energy conservation project ongoing at Hickam Air Force Base. Savings are approximate \$350,000 annually. Stiner is also interested in LED lighting, chiller retrofits, and exit signs, and wants to partner with HECO on cogeneration. Hickam won a national water management award from the U.S. Department of Energy.

Kevin Saito announced that NORESCO was selected to implement an energy performance contract at Pearl Harbor. A \$90,000 CFL project at the barracks replaced 10,350 incandescent bulbs and has an annual savings of \$125,000. The Navy has implemented a water conservation program at Pearl Harbor (they have their own wells) and has seen a 40% savings from installation of 72 vending misers.

Tom Brennan provided information on two parking garage light projects -- "Diamond Head"-side garage at Pearlridge and 1132 Bishop St.

Todd Scheibert reported on several cogen projects. The Pauhai Nani system has been on for 17 months, more tonnage was added and the kitchen is now air-conditioned. In Maui, Hawaiian Linen's 297 kW CHP project will pay off in 19 months. As in the Honolulu Hale Project, interconnection issues have caused delays. Scheibert says that he identified wave form distortion from the capacitor bank that was fused to the circuit and disconnected it, providing better balance to the system and helping to reduce energy usage at Honolulu Hale.

Steve Golden announced that The Gas Company LLC, a newly formed Hawaii-based company, is the new owner of The Gas Company. All the employees were retained and the company will be run by the same management team.

Dave Menicucci, Sandia National Laboratory, made a presentation on **Energy Security through Distributed Energy**. His presentation provided a new perspective for use of distributed generation to provide enhanced energy surety (rather than energy security) for facilities requiring high levels of on-line availability. State of the art distributed energy technologies were discussed as well as the benefits of configuring distributed power systems correctly. Several case studies were included.

Cynthia Winans-Burns, Head of School, Montessori Schools of Maui (MOMI), spoke on school plans for **Developing Sustainability in the Curriculum and in the Campus Plan.** MOMI has a 9-acre campus and 187 students. Winans-Burns described results of a 50-member planning charrette from the Maui community and the University of Hawaii School that focused on integrating sustainability into their campus expansion at Makawao. MOMI is a new Rebuild America partner.

Punahou Case Middle School is also demonstrating the importance of energy, water conservation, recycled and sustainable buildings materials in a school setting. This 9-building, 150,000 sq. ft. facility, will open in the fall of 2004. **Steve Piper**, Director of Physical Plant, spoke about his goal of "lot's of light, fresh air, good furnishings, and national recognition." Piper is seeking a LEED Gold rating for the school, or as he puts it "Going for the Gold." To obtain the LEED certification, Piper is focusing on ice storage, EMS controls for lighting HVAC, passive cooling, ventilation via operable windows, building orientation, high performance e-glass and light shelves, PV, recycled materials and diversion of 75% construction waste, among others. Piper wants Punahou to be a leader in the community for sustainability.

(Thanks to everyone who provided input into these notes.)